

ENT : 2019-2020 MATH\& GAT Sr. No. TIME : 2.00 Hrs.

MAXIMUM MARKS : 150

## QUESTION - BOOKLET

## GENERAL INSTRUCTIONS

1. Do not carry any book, paper or any other material with you inside the Examination Hall.
2. Use only Black / Blue ball pen.
3. Keep the Hall Ticket with you ready for scrutiny.
4. Result of this Examination will be displayed on the Notice Board. The Result Sheet will include the successful/ qualified candidates ONLY.
5. All successful candidates indicated on the list shall present themselves for the invetview on the same day.
6. This Test Booklet contains 150 items (Questions). Question No. 1 to 150 (MCQ) carry 1 mark each You have to select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, Choose Only One response for each item.
7. All the answers must be marked on the Answer Sheet only. Do not write anything on this Test Booklet.
8. IMMEDIATELY AFTERTHE COMMENCEMENT OF THE EXAMINATION,YOU SHOULD CHECK THAT THIS TEST BOOKLET DOES NOT HAVE ANY UNPRINTED ORTORN OR MISSING PAGES OR QUESTION ETC.IF SO, GET IT REPLACED BY THE SUPERVISOR.
9. Ask for a separate paper for rough work.
10. Read the questions carefully, Remember, answers are to be indicated in the Answer Sheet Only. Return the Test Booklet, Rough work papers and the Answer Sheetimmediately when asked to do so. You are NOT permitted to take away with you any paper concerning the Examination.

## ANSWER SHEET

11. The Answer Sheet contains 150 counts, each subdivided in four $\{(1)(2)(3)(4)\}$ subdivisions for indicating the correct choice of answers. After having selected the correct choice from the test Booklet, you should indicate that choice by completely blackening the respective circle, DO NOT merely cross the circle.You should indicate correct answer by blackening ONLY ONE circle in each answer. Any answer having more than ONE blackened circle will be treated as a W RONG answer.
12. Before starting the answering ensure that you have filled the complete information at the top of this Answer Sheet. Incomplete Answer Sheet will be regarded as invalid.

## THANK YOU AND BEST OF LUCK

1. For sets $A, B$ and $C,(A \cup 2) \cup C=A \cup(B \cup 3)$. Which property of the operation of union does this statement suggest?
1) Commutative
2) Associative
3) Distributive
4) Equality
2. Which of the following is true for $\mathrm{A} \cup(\mathrm{B} \cup 1)$ ?
1) $A^{\prime} \cap B$
2) $A \cup B$
3) A
4) B
3. Which of the following is a true relation between $A$ and $(A \cup 2)$ ?
1) $\mathrm{A} \subset(\mathrm{A} \cup 2)$
2) $\mathrm{A}=(\mathrm{A} \cup 2)$
3) $(\mathrm{A} \cup 2) \subset \mathrm{A}$
4) $(\mathrm{A} \cup 2) \cup \mathrm{A}=\mathrm{A}$
4. If $B \subset A$, then what is $B \cap(B \cup 1)$ ?
1) $A$
2) $B$
3) $B^{\prime} \cap A^{\prime}$
4) $\mathrm{B} \cup \mathrm{A}$
5. If $A \cup B=\{a, b, c, d, e, f\}$ and $A=\{b, c, e, f\}$, then which of the following can be set $B$ ?
1) $\{\mathrm{a}, \mathrm{d}, \mathrm{g}\}$
2) $\{a, b, f\}$
3) $\{a, d\}$
4) $\{b, c, f\}$
6. Which of the following sets is a singleton set?
1) $A=\left\{x \mid x^{2}=49, x \in I\right\}$
2) $B=\left\{y \mid 5+y^{2}=4+2 y^{2}, y \in I\right\}$
3) $C=\left\{p \mid p \in I, P^{3}=27\right\}$
4) $\mathrm{D}=\left\{\mathrm{q} \mid \mathrm{q}^{2}-25=0\right\}$
7. What is the decimal form of the rational number $\frac{6}{11}$ ?
1) 0.54
2) $0 . \overline{54}$
3) 0.45
4) $0 . \overline{45}$
8. What is the solution of $\left|x-\frac{1}{2}\right|=\frac{3}{2}$ ?
1) $x=-2$ or $x=1$
2) $x=-2$ or $x=-1$
3) $x=2$ or $x=-1$
4) $x=2$ or $x=1$
9. Which of the following is not a surd ?
1) $\sqrt[4]{0.16}$
2) $\sqrt[3]{0.27}$
3) $\sqrt{0.16}$
4) $\sqrt{0.27}$
10. Which of the following rational numbers lies between the rational numbers $\frac{5}{9}$ and $\frac{7}{12}$ ?
1) $\frac{23}{36}$
2) $\frac{41}{72}$
3) $\frac{19}{36}$
4) $\frac{43}{72}$
11. What is the square root of $2 \sqrt{24}$ ?
1) $\sqrt{8}-\sqrt{3}$
2) $\sqrt[4]{6}$
3) $\sqrt{6}$
4) $\sqrt{12}$
12. What is the $\frac{p}{q}$ form of recurring decimal $0.777 \ldots$ ?
1) $\frac{7}{9}$
2) $\frac{7}{10}$
3) $\frac{7}{11}$
4) $\frac{7}{8}$
13. What should be added to $5 x^{2}+2 x y+y^{2}$ to get $3 x^{2}+4 x y-2 y^{2}$ ?
1) $-2 x^{2}+2 x y-y^{2}$
2) $-2 x^{2}+2 x y+y^{2}$
3) $-2 x^{2}+2 x y-3 y^{2}$
4) $-2 x^{2}+2 x y+3 y^{2}$
14. In which two parts should the middle term be split to factorise $2 x^{2}+5 x-3$ ?
1) $2 x$ and $3 x$
2) $-2 x$ and $-3 x$
3) $x$ and $-6 x$
4) $6 x$ and $-x$
15. $(2 x-3)(3 x+2)$ are the factors of which of the following expressions?
1) $6 x^{2}+5 x-6$
2) $6 x^{2}-5 x-6$
3) $6 x^{2}-9 x-6$
4) $6 x^{2}+9 x-6$
16. What is the coefficient form of the polynomial $x^{5}+3 x^{2}-1$ ?
1) $(1,3,-1)$
2) $(1,0,3,-1)$
3) $(1,0,0,3,0,-1$
4) $(1,0,3,0,-1)$
17. What is the coefficient form of the polynomial $y^{4}+3$ ?
1) $(1,3)$
2) $(1,0,3)$
3) $(1,0,0,3)$
4) $(1,0,0,0,3)$
18. What is the index form of the polynomial $(1,0,-3,0,5)$ taking $x$ as variable?
1) $x^{5}-3 x^{2}+5$
2) $x^{4}-3 x^{3}+5$
3) $x^{4}-3 x^{2}+5$
4) $x^{4}-3 x+5$
19. When $\left(x^{3}+2 x^{2}-x-1\right)$ is divided by $(x-1)$, the remainder is zero. What is the value of $a$ ?
1) -1
2) 1
3) -2
4) 2
20. Which of the following is not a linear equation in two variable?
1) $x+y=3$
2) $x-2 y=3$
3) $x-7=y$
4) $x y=3$
21. Which of the following is not the solution of $2 x+3 y=6$ ?
1) $(-3,4)$
2) $(3,-4)$
3) $(0,2)$
4) $(3,0)$
22. Which of the following represents the general form of the linear equation $y=5 x-7$ ?
1) $5 x-y=7$
2) $5 x-y-7=0$
3) $y-5 x+7=0$
4) $5 x+y=-7$
23. What is the value of $x$, if $2 x+y=5$ and $y-1=0$ ?
1) 5
2) 4
3) 2
4) 0
24. What is the value of $(x-y)$, if $\frac{x}{2}=\frac{6}{y}=2$ ?
1) 4
2) 1
3) -1
4) 0
25. What is the solution of the simultaneous equations $2 x+y=5$ and $x+2 y=4$ ?
1) $(2,2)$
2) $(1,1)$
3) $(1,2)$
4) $(2,1)$
26. What is the value of $(x-y)$, if $4 x+3 y=24$ and $3 x+4 y=25$ ?
1) -1
2) 1
3) 7
4) -7
27. What is the value of $\left(\frac{1}{x}-\frac{1}{y}\right)$, if $\frac{6}{x}-\frac{3}{y}=10$ and $\frac{2}{x}-\frac{5}{y}=6$ ?
1) 1
2) 2
3) -2
4) 4
28. In which quadrant or on which axis will the point $(x, y)$ lie in the following cases? $\mathrm{x}<0, \mathrm{y}<0$
1) Quadrant I
2) Quadrant II
3) Quadrant III
4) Quadrant VI
29. In which quadrant or on which axis will the point ( $\mathrm{x}, \mathrm{y}$ ) lie in the following cases? $x>0, y=0$
1) $X$-axis
2) $Y$-axis
3) Quadrant I
4) Quadrant VI
30. Where does the point $(-3,0)$ lie in the Cartesian coordinate system?
1) Quadrant II
2) Quadrant III
3) $X$-axis
4) Y-axis
31. In rectangle $\mathrm{ABCD}, \mathrm{AB}: \mathrm{BC}=5: 3$. $\mathrm{A}(\square \mathrm{ABC} 4)=29.4 \mathrm{~cm} 2$. What is the length of AB ?
1) 1.4 cm
2) 2.8 cm
3) 4.2 cm
4) 7.0
32. What is the simplest form of the ratio of 3 min 54 sec to 1 min sec ?
1) $2: 1$
2) $3: 1$
3) $78: 29$
4) $4: 1$
33. What is the percentage form of $\frac{16}{5}$ ?
1) $3200 \%$
2) $320 \%$
3) $32 \%$
4) $3.2 \%$
34. If $x: y=a: b$, then by which property of equal ratios is $x: a=y: b$ ?
1) Invertendo
2) Alternendo
3) Componendo
4) Dividendo
35. Which mathematician is known as the father of statistics?
1) Sir Ronald Fisher
2) Blaise Pascal
3) Pierre Fermat
4) Jacques Bernoulli
36. What is the mean of observations
$2,4,7,8,9$ ?
1) 9
2) 3
3) 30
4) 6
37. What is the mean of observations $12,8,10,6,9$ ?
1) 8.5
2) 7.5
3) 9
4) 10
38. What is the mean of first five even natural numbers?
1) 30
2) 7
3) 6
4) 5
39. What is the mean of first five odd natural numbers?
1) 25
2) 9
3) 7
4) 5
40. What is the value of $x$, if the mean of $21,22,23,24$, and $x$ is 23 ?
1) 25
2) 24
3) 23
4) 22
41. How many lines can be drawn passing through a given point.
1) One and only one
2) Two
3) Four
4) Infinite
42. How many points determine a plane?
1) Three collinear points
2) Three non-collinear points
3) Any two points
4) Any four points
43. What is the intersection of two planes?
1) A line
2) A point
3) A plane
4) An angle
44. If $l(\mathrm{~A} 2)=7 \mathrm{~cm} . l(\mathrm{BP})=4 \mathrm{~cm}$ and $l(\mathrm{AP}) 5.4 \mathrm{~cm}$, then which of the following is true?
1) $\mathrm{AB}<\mathrm{BP}<\mathrm{AP}$
2) $\mathrm{AP}<\mathrm{AB}<\mathrm{BP}$
3) $\mathrm{BP}<\mathrm{AP}<\mathrm{AB}$
4) $\mathrm{BP}<\mathrm{AB}<\mathrm{AP}$
45. How many elements does a triangle have?
1) Two
2) Three
3) Six
4) Nine
46. In $\triangle \mathrm{ABC}, \angle \mathrm{A}=45^{\circ}, \angle \mathrm{B}=45^{\circ}, \angle \mathrm{C}=90^{\circ}$. What type of $\Delta \mathrm{ABC}$ is?
1) Isosceles triangle
2) Isosceles right angled triangle
3) Right angled triangle
4) Equilateral triangle
47. Which of the following are not cevians in an acute angled triangle?
1) Perpendicular
2) Medians
3) Angle bisectors
4) Altitudes
48. In which type of triangle does the centroid, incentre and orthocentre lie at the same point?
1) An isosceles triangle
2) A right angled triangle
3) An equilateral triangle
4) An isosceles right angled triangle
49. For the correspondence $\mathrm{ABC} \leftrightarrow \mathrm{RQP}$ between $\triangle \mathrm{ABC}$ and $\triangle \mathrm{PQR}$, $\operatorname{seg} \mathrm{AB}=\operatorname{seg} \mathrm{QR}, \operatorname{seg} \mathrm{Ac} \cong \operatorname{seg}$ PR and $\angle \mathrm{A} \cong \angle \mathrm{R}$. Then by which test are the triangles congruent?
1) SAS
2) SAA
3) ASA
4) SSS
50. in $\Delta \mathrm{ABC}, \mathrm{D}$ is a point on side BC such that $\mathrm{AD}=\mathrm{BD}=\mathrm{CD}$. Then which of the following is true?
1) $\triangle \mathrm{ABC}$ is an equilateral triangle
2) $\Delta \mathrm{ABC}$ is a right angled triangle
3) $\Delta \mathrm{ABC}$ is an isosceles right angled triangle
4) $\triangle \mathrm{ABC}$ is an isosceles triange
51. What is the measure of the acute angle of an isosceles right angled triangle?
1) $30^{\circ}$
2) $40^{\circ}$
3) $45^{\circ}$
4) $60^{\circ}$

52 . in $\triangle \mathrm{ABC}, \angle \mathrm{C} \cong \angle \mathrm{A}$. Which sides of $\triangle \mathrm{ABC}$ are congurent?

1) Any two
2) AC and BC
3) $A B$ and $A C$
4) $A B$ and $B C$
53. What are the circles with centre $P$ and radius 6 cm and with centre $P$ and radius 8 cm called?
1) The same circles
2) Congruent circles
3) Concentric circles
4) Collinear circles
54. What are the circles with centre P and radius 4.5 cm and with centre Q and radius 4.5 cm called?
1) The same circles
2) Congruent circles
3) Concenric circles 4) Collinear circles
55. Line $l$ lies in the plane of a circle with centre P and radius $5 \mathrm{~cm} . \mathrm{M}$, the foot of the perpendicular from P on the line $l$, lies in the interior of the circle. What is the length of PM?
1) $\mathrm{PM}>5 \mathrm{~cm}$
2) $\mathrm{PM} \geq 5 \mathrm{~cm}$
3) $\mathrm{PM}=5 \mathrm{~cm}$
4) $\mathrm{PM}<5 \mathrm{~cm}$
56. Line $l$ lies in the plane of a circle with centre P and radius 8 cm . M , the foot of the perpendicular from P on the line $l$ does not line in the interior of the circle. What is the length of PM?
1) 8 cm
2) $<8 \mathrm{~cm}$
3) $>8 \mathrm{~cm}$
4) $\geq 8 \mathrm{~cm}$
57. $\square \mathrm{ABCD}$ is a parallelogram in which $\mathrm{AB}=4 \mathrm{~cm}$ and $\mathrm{BC}=5 \mathrm{~cm}$. What is its perimeter?
1) 9 cm
2) 20 cm
3) $20 \mathrm{~cm}^{2}$
4) 18 cm
58. The perimeter of parallelogram PQRS is 30 cm . If $\mathrm{PQ}: \mathrm{QR}=2: 3$, what is the length of RS?
1) 3
2) 4
3) 6
4) 9
59. $\square \mathrm{ABCD}$ is a parallelogram in which $\mathrm{AB}=2 \mathrm{BC}$. If $\mathrm{CD}=8 \mathrm{~cm}$, then what is the perimeter $\square \mathrm{ABCD}$ ?
1) 12 cm
2) 24 cm
3) 28 cm
4) 32 cm
60. In parallelogram $\mathrm{DEFG}, \angle \mathrm{D}: \angle \mathrm{E}=7: 11$. What is the measure of $\angle \mathrm{F}$ ?
1) $70^{\circ}$
2) $35^{\circ}$
3) $55^{\circ}$
4) $110^{0}$
61. What is the distance between the points $\mathrm{A} \equiv(4,7)$ and $\mathrm{B} \equiv(-1,5)$ ?
1) 5
2) 12
3) 13
4) $\sqrt{13}$
62. What is the distance of the point $\mathrm{P} \equiv(-3,4)$ from the origin O ?
1) 5
2) -3
3) 4
4) -5
63. The coordinates of the midpoint of seg AB are $(1,1)$ and the coordinates of point B are $(4,3)$. What are the coordinates of point A ?
1) $(2,1)$
2) $(-2,1)$
3) $(2,-1)$
4) $(-2,-1)$
64. $\mathrm{P} \equiv(-7,4)$ and $\mathrm{Q} \equiv(5,-2)$. Point R divides segment PQ internally in the ratio $1: 1$. What are the coordinaes of the point R.
1) $(1,1)$
2) $(-1,1)$
3) $(-1,-1)$
4) $(1,-1)$
65. The distance between the points $\mathrm{A} \equiv(2,-3)$ and $\mathrm{B} \equiv(5, \mathrm{x})$ is 5 . What is the value of x ?
1) 1
2) 7
3) 2
4) 5
66. $\triangle \mathrm{ABC}, \angle \mathrm{B}=90^{\circ}$. If $\mathrm{AB}=8 \mathrm{~cm}, \mathrm{BC}=15 \mathrm{~cm}$ and $\mathrm{AC}=17 \mathrm{~cm}$, then what is the value of $\cos \mathrm{C}$ ?
1) $\frac{8}{15}$
2) $\frac{15}{8}$
3) $\frac{15}{17}$
4) $\frac{8}{17}$
67. In $\Delta \mathrm{ABC}, \angle \mathrm{C}-90^{\circ}$. If $\mathrm{AB}=5 \mathrm{~cm}, \mathrm{AC}=4 \mathrm{~cm}$ and $\mathrm{BC}=3 \mathrm{~cm}$, then what is the value of $\tan \mathrm{B}$ ?
1) $\frac{4}{3}$
2) $\frac{3}{4}$
3) $\frac{4}{5}$
4) $\frac{3}{5}$
68. If $2 \sin \theta=3 \cos \theta$, then what is the value of $\tan \theta$ ?
1) $\frac{2}{3}$
2) $\frac{3}{2}$
3) 1
4) $\frac{1}{2}$
69. If $\tan \theta=1$, then what is the value of $\sin \theta \cdot \cos \theta$ ?
1) 1
2) 2
3) $\frac{1}{4}$
4) $\frac{1}{2}$
70. $\Delta \mathrm{ABC}, \angle \mathrm{C}-90^{\circ}$. If $\mathrm{AC}=15 \mathrm{~cm}$ and $\sin \mathrm{C}=\frac{3}{5}$, then what is the value of AB ?
1) 3 cm
2) 6 cm
3) 9 cm
4) 12 cm
71. $\square \mathrm{ABCD}, \angle \mathrm{B}=90^{\circ}$. If $\mathrm{AB}=6 \mathrm{~cm}$ and $\mathrm{BC}=8 \mathrm{~cm}$, then what is $(\triangle \mathrm{AB} 3)$ ?
1) $24 \mathrm{~cm}^{2}$
2) $30 \mathrm{~cm}^{2}$
3) $40 \mathrm{~cm}^{2}$
4) $48 \mathrm{~cm}^{2}$
72. In $\Delta \mathrm{PQR}, \mathrm{RS}$ is an altitude corresponding to base PQ . If $\mathrm{PQ}=10 \mathrm{~cm}$ and $\mathrm{RS}=8 \mathrm{~cm}$, then what is A ( $\triangle \mathrm{PQR}$ )?
1) $80 \mathrm{~cm}^{2}$
2) $48 \mathrm{~cm}^{2}$
3) $40 \mathrm{~cm}^{2}$
4) $24 \mathrm{~cm}^{2}$
73. $\square \mathrm{WXYZ}$ is a parallelogram. If $\mathrm{A}(\Delta \mathrm{WXZ})=16 \mathrm{~cm}^{2}$. then what is $\mathrm{A}(\square \mathrm{WXYZ})$ ?
1) $16 \mathrm{~cm}^{2}$
2) $32 \mathrm{~cm}^{2}$
3) $24 \mathrm{~cm}^{2}$
4) $48 \mathrm{~cm}^{2}$
74. $\square \mathrm{ABCD}$ is a rhombus in which $\mathrm{AC}=6 \mathrm{~cm}$ and $\mathrm{BD}=9 \mathrm{~cm}$. What is the area of rhombus ABCD ?
1) $54 \mathrm{~cm}^{2}$
2) $45 \mathrm{~cm}^{2}$
3) $15 \mathrm{~cm}^{2}$
4) $27 \mathrm{~cm}^{2}$
75. If the are of rhombus ABCD is $40 \mathrm{~cm}^{2}$ and $\mathrm{AC}=8 \mathrm{~cm}$, then what is the length of BD ?
1) 5 cm
2) 8 cm
3) 10 cm
4) 16 cm

## PART - II GAT

* Q.76. to 78 : Read the following passage carefully and answer the questions choosing the correct option.


## PASSAGE-I

Without causing any pollution in the form of suffocating fumes and earsplitting explosions, the bicycle converts energy into motion and, that too, more efficiently than any other machine. For the first time since the appearance of motor cars, the bicycle is seen today as a more attractive means of transport. Improved technology, combined with heightened interest in the environment, the outdoors and physical fitness, have transformed the image of bicycling in Europe and America into a fashionable and healthy activity. Cycling is a form of sport that enables people to rediscover nature. The ATB (all-terrain-bike) is used in riding to the top of mountains and in cross-country races. Riding an ATB is a great way of keeping fit, and it is quieter than walking. The cyclist hears no sound of the tyres on the path and is free to watch the flora and fauna while having a joyride with friends.
76. The image of the bicycle has changed mainly because of

1) interest in environment and physical fitness
2) physical fitness and fashion
3) its noiselessness \& smoke free operation
4) improved technology and fashion
77. The bicycle is a machine which
1) Converts physical energy into motion easily
2) require as much energy as a motor car.

3 ) is not as good as a motor car for sight seeing
4) is not in fashion these days.
78. Riding on ATB is quieter than walking because

1) its tyres produce no sound while moving along the path
2) its tyres do not touch the ground
3) it has a very slow speed
4) walking shoes are noisy

## Q.79. to 81 : Read the following passage carefully and answer the questions choosing the correct option.

## PASSAGE-II

We had often animal visitors that were not welcome. Scorpions were frequently found in our cells, especially after a thunder-storm. It was surprising that I was never stung by one, for I would come across them in the most unlikely place - on my bed, or sitting on a book which I had just lifted up. I kept a particularly black and poisonous-looking brute in a bottle for sometime, feeding him with flies, etc., and then when I tied him up on a wall with a string he managed to escape. I had no desire to meet him loose again, and so I cleaned my cell out and hunted for him everywhere, but he had vanished.
79. Scorpions were unwelcome visitors because

1) they were black and ugly
2) the author was afraid of them
3) they made the room dirty
4) the author did not love animals
80. The author kept a scorpion in a bottle because he wanted to
1) feed him with flies
2) clean his room
3) watch him out of curiosity
4) torutre him
81. When the scorpion escaped from the bottle, the author was
1) happy
2) scared
3) indifferent
4) sad

* Instruction : Fill in the blanks with suitable alternative.

82. Please add a little sugar in the tea.
1) Countable Noun
2) Abstract Noun
3) Uncountable Noun
4) Collective Noun
83. He was honared for his bravery.
1) Collective Noun
2) Abstract Noun
3) Common Noun
4) Proper Noun
84. Ritesh has been reading a novel for last two days.
1) Present Perfect tense
2) Present Perfect continuous tense
3) Past Perfect tense
4) Past Perfect continuous tense
85. The result was declared by the board.
1) subject
2) complement
3) object
4) Adverbial
86. You will pass the exam if you study well.
1) main clause
2) subordinate clause
3) principal clause
4) none of these
87. I go to school $\qquad$
1) regular
2) regularly
3) irregular
4) none of these
88. Sanjiv. now.
1) was playing
2) play
3 ) is playing
3) none of these
89. The sentence, "This is the boy whom I met yesterday." is
1) Simple sentence
2) compound sentence
3) complex sentence
4) none of these

* Instruction : Find the word with correct spellings. 90.

1) Colonel
2) Colonal
3) Cornal
4) Curnel

* Instruction : Give the Synonyms of :

91. He is good-looking but insipid young man.
1) Arrogant
2) Unspcupulous
3) Sick
4) Lacking in spirit
92. He had insidiously wormed his way into her affections.
1) In a polite manner
2) In a seceat manner
3) In ugly way
4) In a forceful manner
93. His boss's criticism left him feel rather abashed.
1) Annoyed
2) Arrogant
3) Embarrassed
4) Awakened
94. The inexorable demands of the workers brought the company to a closure.
1) Unreasonable
2) Relentless
3) Monetary
4) Violent
95. The acerbic remarks of the manager were unwarranted.
1) Bitter
2) furious
3) Arrogant
4) Childish

* Instruction : Give the Antonyms of :

96. There was a marginal increase in his pay.
1) peripheral
2) significant
3) negligible
4) unforeseen
97. The geologists declared that the fossil was authentic.
1) fake
2) beautiful
3) old
4) new
98. The commitee set about making provisional arrangements for the annual conference.
1) permanent
2) lasting
$3)$ abiding
3) unconditional
99. He climbed up a stationary wagon.
1) standing
2) shunting
3) speeding
4) moving
100. It is surprising to find her conditioning such an act.
1) forbidding
2) disliking
3) condemning
4) allowing
101. If in a certain language, GAMBLE is coded as FBLCKF, how is FLOWER coded in that code?
1) GKPVFQ
2) EMNXDS
3) GMPVDS
4) HNQYGT

* Direction : In each of the following questions, four words have been given, out of which three are alike in some manner and one is different. Choose the odd one.

102. 
1) Raid
2) Attack
3) Assault
4) Defence

* Direction : In each of the following questions, a number series is given with one term missing. Choose the correct alternative that will continue the same pattern and fill in the blank spaces.

103. $3,6,18,72$, (.......)
1) 144
2) 216
3) 288
4) 360
104. Rasik walks 20 m North. Then he turns right and walks 30 m . Then he turns right and walks 35 m . Then he turns left and walks 15 m . Then he again turns left and walks 15 m . In which direction and how many metres away is he from his original position?
1) 15 metres West
2) 30 metres East
3) 30 metres West
4) 45 metres East

* Direction : In each of the following questions, there is a certain relationship between two given words on one side of : :and one word is given on another side of : : while another word is to be found from the given alternatives, having the same relation with this word as the words of the given pair bear. Choose the correct alternative.

105. Muslims : Mosque : : Sikhs : ?
1) Golden Temple
2) Medina
3) Fire Temple
4) Gurudwara
106. Plant cel differ from animal cell in absence of -
1) centrioles
2) mitochondria
3) endoplasmic
4) ribosomes
107. Plasmolysis occur due to -
1) osmosis
2) absorption
3) exosmosis
4) endosmosis
108. Suicidal bag of cell is the -
1) ribosome
2) lysosome
3) cisterna
4) vacuole
109. ATP molecule formation is by-
1) cytoplasm
2) nucleus
3) nucleoplasm
4) chromosomes
110. Endoplasmic reticulum network found in -
1) cytoplasm
2) nucleoplasm
3 ) only nucleus
3) chromosomes
111. Inheritance is the function of -
1) nucleus
2) chromosome
3) centriole
4) all of these
112. Egg is the single largest cell.
1) ostrich
2) neuron
3) emu
4) crow
113. The cortex of brain have -----------nerve cell.
1) then thousand
2) ten thousand million
3) ten lakh
4) only one thousand
114. Osmotic pressure of cell is maintained by -
1) cytoplasm
2) mitochondrion
3) vacuole
4) golgi godies
115. Which of the following part a seed stores food?
1) cotyledon
2) shoot
3) root
4) plumule
116. The leaf like part of the embryo is called:
1) plumule
2) radicle
3) micropyle
4) cotyledons
117. A sapling grows into:
1) seed
2) plant
3) seedling
4) all the above
118. Animals with a backbone are called:
1) Vertebrates
2) invertebrates
3) echinoderms
4) insects
119. Which of these animals has slimy scales on their body?
1) reptiles
2) bird
3) fish
4) pangolin
120. Hypostomatous (stomate on the lower surface) plants are usually:
1) aquatic plants
2) semiaquatic plants
3) non-aquatic plants
4) none of these
121. What is the latitudnal extent of mainland India?
1) $8^{\circ} 428^{\prime \prime}$ to $37^{\circ} 653^{\prime \prime}$ North
2) $29^{\circ} \quad 2,25^{\prime \prime}$
3) $07^{\circ}, 03^{\prime}$ to $37^{0} 7^{0} 28^{\prime \prime}$ North
4) $0804^{\prime} 28$ to $3703^{\prime} 28^{\prime \prime}$ North
122. Where is the Indira Point located at?
1) $08^{\circ} 45$ " North latitude
2) $06^{\circ} 45 "$ North latitude
3) 0745 " North latitude
4) $08^{\prime \prime} 50$ "
123. What is the longitudnal extent of India?
1) $29^{\circ} 14^{\prime} 17^{\prime \prime}$
2) $29^{\circ} 17^{\prime} 14^{\prime \prime}$
3) $17^{\circ} 17^{\prime} 29^{\prime \prime}$
4) $14^{\circ} 17^{\prime} 29^{\prime \prime}$
124. Where is the prime meridian of India lacated?
1) $82^{\circ} 25^{\prime}$
2) $82^{\circ} 35$
3) $82^{\circ} 30^{\prime}$
4) $83^{\circ} 30^{\prime}$
125. When was the "Quit India Movement" resolution sanctioned?
1) 14 July 1942
2) 14 July 1922
3) 14 July 1920
4) 12 March 1930
126. What is the name of the southern most tip of Indian territory?
1) Kanniyakumary
2) Madurai
3) Indira Point
4) Chennai
127. Where does the Indus river originate?
1) Zaskar Range
2) The karakoram
3) Mansarovar
4) Subansiri
128. How many percent of the people of Rajasthan live in Desert?
1) $22 \%$
2) $38 \%$
3) $43 \%$
4) $64 \%$
129. Which project is built on the Sutlej river?
1) Bhakra-Nangal
2) Hirakund
3) Jayakwadi
4) Damodar Valley
130. What type of soil is found in Bangar region?
1) New alluvial
2) older alluvial
3) consisting chemicial
4) consisting boulders and gravels
131. Who was the Viceroy at the time of Quit India Movement?
1) Lord Irwin
2) Lord Mountbatten
3) Lord Wavell
4) Lord Linlithgow
132. The country that shares longest border with India is-
1) China
2) Bangladesh
3) Nepal
4) Pakistan
133. "Deshbandhu" is the title of-
1) B. R. Ambedkar
2) C. R. Das
3) B. C. Pal
4) Rabindranath Tagore
134. The first woman to conquer Mount Everest twice is-
1) Surja Lata Devi
2) Jyoti Randhawa
3) Santosh Yadav
4) Suma Shirur
135. Which Indian hockey player has a road named after him in Germany?
1) Dhyan Chand
2) Zafar Iqbal
3) Roop Singh
4) Dhanraj Pillai
136. Who described the Government of India Act, 1935 as a new charter of bondage?
1) B. R. Ambedkar
2) Mahatma Gandhi
3) Rajendra Prasad
4) Pt. Jawaharlal Nehru
137. Kaziranga National Park is situated in-
1) Odisha
2) Gujarat
3) Rajasthan
4) Assam
138. Which City is the venue of the 2018 women's world Boxing championships.
1) New Delhi
2) Pune
3) Shimla
4) Patna
139. In which year the Azad Hind Government was formed by Netaji Subhas Chandra Bose.
1) 1943
2) 1942
3) 1940
4) 1941
140. Which one of these books was written by V.S. Khandekar?
1) Yayati
2) Mrutunjay
3) Shriman Yogi
4) Panipat
141. Literacy rate is heigher in Brazil than $\qquad$
1) India
2) America
3) England
4) Germany
142. The life expectency of India's is. $\qquad$
1) Increasing
2) Decreasing
3) Developing
4) All above
143. Who was the president of America during first world war?
1) woodrow wilson
2) Franklin Roosevelt
3) George Washington
4) John kenedy
144. The East European region (Balkan area) was under the empire of.....
1) Austria
2) Hungary
3) Germany
4) Turkey
145. Mustafa Kemal Pasha was born in wood-seller's family
1) Germany
2) Turkey
3) Japan
4) Hungary
146. When and where was the first Olympic games held?
1) 1995 , Athens
2) 1896 Athena's
3) London 2000
4) Rome 1920
147. Where is wankhede Stadium located?
1) Chennai
2) Pune
3) Nagpur
4) Mumbai
148. Where did Christopher Columbus landed?
1) Asia
2) Africa
3) England
4) West Indies
149. Who was the leader of Germany from 1933 to 1945 ?
1) Adolf Hitler
2) Martin Luther king Jr.
3) Alexander the Great
4) Karl Marx.
150. How many permanent members are there in the security council.
1) Three
2) Five
3) Four
4) $\operatorname{Six}$
